REMARKS

Claims 145, 148, 150-155, 158, 160-165, 167-173 and 175-180 are in the case and presented for reconsideration. Claims 146, 147, 149, 156, 157, 159, 166 and 174 have been canceled. Claims 145, 148, 150, 152, 153, 155, 158, 160, 162, 163, 165, 170, 171, 173, 175, 176, 178 and 179 have been amended. No new matter has been added.

Claims 145-157 have been rejected under 35 U.S.C. § 102 (e) as being anticipated by U.S. Patent No. 6,070,094 (Swanson et al.).

The Applicant would like to point out that the system and method of Swanson et al. uses a basket structure 20 having a movable ablation electrode 36 and a plurality of electrodes 24 on the basket structure 20. Column 14, Lines 29-33 and Fig. 9. A processing element 48(2) includes an ultrasound generator 90 coupled to an ultrasound transducer 92 which is carried on or near the ablation electrode 36. Column 14, Lines 36-38. The processing element 48(2) also includes small, compact ultrasound transducers 94 placed on or adjacent to the electrodes 24, i.e. also located on the basket structure 20. Column 14, Lines 46-47. The processing element 48(2) "generates an ultrasonic field within the interior space 22 of the basket structure 20 between the ablation electrode 36 and the electrodes 24." Column 14, Lines 29-33. It is important to note that the processing element 48(2) is used solely to analyze ultrasonic information in order to locate the position of the ablation electrode 36 within the interior space 22 defined by basket structure 20. Column 14, Lines 33-35. Thus, the Swanson et al. system is only capable of using ultrasound to track the position of the movable ablation electrode 36 within the interior space 22 defined by the basket structure 20 of the Swanson et al. device. Additionally, the Swanson et al. reference does not in any way address using an ultrasound position sensor to map the heart through a plurality of geometric snapshots of the heart based on the position of a tip of a catheter on a surface of the heart at a point in time in a cardiac cycle.

The Applicant's claimed present invention has been amended in order to more particularly point out a method for mapping a heart comprising inserting a mapping catheter having a tip and an ultrasonic position sensor located at the tip into the heart; and inserting at

least one reference catheter having an ultrasonic position sensor into the heart (Claim 145 and Claim 165) or outside the heart (Claim 155 and Claim 173). The method in accordance with the present invention also comprises placing the tip of the mapping catheter on a surface of the heart at a plurality of points in time of a cardiac cycle (or bringing the tip into contact with a wall of the heart at a point in time of a cardiac cycle) and determining a position of the mapping catheter relative to the at least one reference catheter and making a geometric snapshot of the heart during each point in time of the cardiac cycle and making a map comprised of each geometric snapshot. The support for this Amendment can be found in the Applicant's Specification, for example, Page 27, Lines 13-32.

It is important to note that the Swanson et al. system and method of use are entirely incapable of achieving the novel heart mapping method of the Applicant's claimed invention. Particularly, since the Swanson et al. system is only capable of tracking and mapping movement of its ablation electrode about the interior space of its basket structure, it is simply not feasible to utilize the Swanson et al. system to perform a mapping method that includes a plurality of geometric snapshots of the heart which are made based on the position of the tip of the mapping catheter on a surface of the heart at a point in time of a cardiac cycle (using an ultrasound position sensor located at the tip) such that the plurality of geometric snapshots are used to make a map. These novel method steps are neither described, suggested or inferred in Swanson et al. Thus, the Applicant's claimed present invention as amended is both patentably distinct and non-obvious over Swanson et al.

Accordingly, based on this Amendment and for the reasons outlined above, the Applicant's claimed invention is neither anticipated by nor rendered obvious by the prior art of record and favorable action is respectfully requested.

Respectfully submitted,

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Dated: July 18, 2003